

205
Begin

REEL

546

STAROVYTOVA, T.V.

STAROVYTOVA, T.V.; LAKHNO, Ye.S. [Lakhno, IE.S.]

Methods of studying the antifibrotic activity of woody plants.
Mikrobiol. zhur. 27 no.4:71-74 '65. (ABR 19:8)

1. Ibratskiy nauchno-issledovatel'skiy institut kormitel'noy
gig'iny Ministerstva zdor'okhraneniya SSSR.

L 58795-65 EWT(1)/EWA(h) Feb GW/GS

ACCESSION NR: AT5020285

UR/0000/65/000/000/0141/0155

AUTHOR: Starshinova, Ye. A.

TITLE: Propagation of Airy waves in shallow water during deep seismic sounding at sea

SOURCE: Akademiya nauk SSSR. Institut fiziki Zemli. Voprosy metodiki glubinnogo seysmicheskogo zondirovaniya. Moscow, Izd-vo "Nauka", 1965, 141-155

TOPIC TAGS: seismic wave, seismography, oceanography ✓

ABSTRACT: This paper is based on analyses made of more than 350 oscillographic registrations of sound obtained under different conditions. The research was performed to study the dynamic and kinematic characteristics of Airy waves, to determine their relationships to oceanological conditions, to investigate the use of these waves in determining the velocity of sound in sediments, and to determine optimum distances between shot holes and registration stations. Orig. art. has: 5 figures, 3 tables, 9 graphs.

Card 1/2

L 58795-65

ACCESSION NR: AT5020285

ASSOCIATION: none

SUBMITTED: 19Jan65

ENCL: 00

SUB CODE: ES

NR REF SOV: 010

OTHER: 004

FSB v. 1, no. 7

Card

2/2

STAROVoytova, Ye. I.

62B-2-2/8

AUTHORS: Poddubnyy, I. Ya; Reykh, V. N; Starovoytova, Ye. I;
Mazarov, V. G.

TITLE: The Influence of the Molecular Weight of Polymers on
Some Physical-Mechanical Properties of Their Vulcanisates.
(Vliyaniye velichiny molekulyarnogo vesa polimerov na
nekotoryye fiziko-mekhanicheskiye svoystva ikh vulkanizatorov).

PERIODICAL: Kauchuk i Rezina, 1958, Nr.2. pp. 6 - 11. (USSR).

ABSTRACT: The dependence of the strength and elasticity of vulcani-
sates on the molecular weight of the initial polymers was
investigated for a number of 1,3-butadiene- and 1,3-
butadiene-styrene rubbers made in the USSR. A similar
investigation was carried out by A. S. Novikov et al.
(Ref.11) on a sample of 1,3-butadiene-styrene rubber
CKC-30A. Samples of Na-1,3-butadiene rubber were pre-
pared at 10°, 20° and 70°C (samples 1-5, 2-6, and 3-5), of
potassium 1,3-butadiene rubber CKB at 0° and 60°C (samples
1-B and 2-B), and of emulsified 1,3-butadiene-styrene rubber
CKC-30, CKC-30A and CKC-30S (samples 2C, 4CA and 1CE).
Properties of these polymers are given in Table 1. The
samples were fractionated according to a method by
I. I. Zhukov, I. Ya. Poddubnyy and A. V. Lebedev (Ref.12).
The molecular weight of fractions was determined viscosi-
metrically, and calculated according to the formula

Card 1/4

62B-2-2/8

The Influence of the Molecular Weight of Polymers on Some Physical-Mechanical Properties of Their Vulcanisates.

$\sigma = f(M)$, according to a method evolved in the Physico-Chemical Laboratory of VNIISK. The composition of rubber mixtures based on 1,3-butadiene and 1,3-butadiene-styrene rubber is given in Table 2; Table 3: variation in the molecular weight of the polymers during mixing on 185 x 75 mm rollers; Table 4 and 5: the physico-mechanical properties of vulcanisates of fractions of various rubbers. It was found that for most polymers the strength of the vulcanisates depends on the molecular weight (Fig.1). The investigated polymers differed also with regard to the value of the molecular weight above which the strength of vulcanisates is practically independent from the molecular weight; for 1,3-butadiene-styrene rubber the curve for strength-molecular weight reaches a maximum in the region 180 - 200,000 and for 1,3-butadiene rubbers in the region 320 - 340,000. Figures 2 and 3 give the ratio of the strength/R of 1,3-butadiene-styrene vulcanisates and 1,3-butadiene rubbers and the molecular weight. It can also be seen that at very high molecular weights the strength of the vulcanisates of 1,3-butadiene-styrene rubber can reach a value of 360 - 380 kg/cm²; under similar conditions, the strength of

Card 2, 4

62B-2-2/8

The Influence of the Molecular Weight of Polymers on Some Physical-Mechanical Properties of Their Vulcanisates.

1,3-butadiene rubber vulcanisates CKB and of 1,3-butadiene rubber CKB manufactured at 0°C reaches a value of 260 - 270 kg/cm². Potassium - 1,3-butadiene rubber CKS, manufactured at 60°C has a very low breaking strength when compared with the polymer manufactured at 0°C. It was also shown that a linear relation governs the dependence of the break strength of vulcanisates and the value $\frac{1}{M}$ = R. A molecular weight of 34,000 was found to give a strength of the vulcanisates practically equal to 0 for sodium 1,3-butadiene rubber, and the rubber CKB prepared at 0°C, and a molecular weight of 25,000 for 1,3-butadiene-styrene rubber. It was shown that 1,3-butadiene-styrene rubbers lose their elastic properties at a molecular weight of 20,000, and 1,3-butadiene rubbers at a molecular weight of 24,000. The character of the strength and elastic properties of the rubber CKB prepared at 60°C was determined; the vulcanisates of this polymer have very low values of break strength and elasticity which are practically independent from the molecular weight of the initial polymer. There are 24 References, 13 Russian

Card 3/4

62B-2-2/8

The Influence of the Molecular Weight of Polymers on Some Physical-Mechanical Properties of Their Vulcanisates.

11 English.

ASSOCIATION: All-Union Research Institute for Synthetic Rubber im. S. V. Lebedev. (Vsesoyuznyy nauchno-issledovatel'skiy Institut sinteticheskogo kauchuka im. S. V. Lebedeva).

AVAILABLE: Library of Congress.

Card 4/4

1. Vulcanizates- Physical Properties 2. Vulcanizates-Mechanical properties 3. Polymers-Molecular weight 4. Butadienes-(Polymerized)-Properties

SOV/20-120-3-27/67
AUTHORS: Iodubnyy, I. Ya., Erenburg, Ye. G., Starovoytova, Ye. I.
TITLE: On the Structure of the Vulcanisation-Network in Carboxyl-
-Containing Polymers (O stroynii setki vulkanizatorov kar-
boksilsoderzhashchikh polimerov)
PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp. 535-538
(USSR)
ABSTRACT: As is known, the physical and mechanical properties of rub-
ber are dependent upon the molecular structure of the initial
polymers. The structure of the vulcanization network is not
of a less importance in this respect. Such rubber kinds are
of special interest for the examination of the latter, the
macromolecules of which contain small amounts of functional
groups, as for example carboxy groups. (Ref 1). When such
polymers are vulcanized with metal oxides, highly elastic
rubber types are produced with an extraordinary high elastici-
ty in unfilled mixtures. The specific physical and mechani-
cal properties of such vulcanisates are apparently connect-
ed with the particular nature of the structure of their

Card 1/3

SOV/20-120-3-27/67

On the Structure of the Vulcanisation-Network in Carboxyl-Containing
Polymers

vulcanization network. This structure was determined by the authors by means of an equilibrium swelling method (Ref 3). It appears from the results of the work that the vulcanization of carboxyl-containing polymers by metal oxides is practically not connected with the formation of normal chemical compounds, which correspond to the structure of medium magnesium-, potassium-, and zinc salts of high-molecular acids. All the more probably the "salt network" is produced (according to an assumption by V. A. Kargin) because of the formation of compounds of the type of basic salts, which on the grounds of their bad solubility in the polymer either form crystalline agglomerates or remain linked with the oxide particles distributed in the polymer. In this case the strength of the vulcanization bindings should be dependent upon the solubility of these salts in the polymer, that is to say, that it should decrease with increasing solubility. The authors determined that the solubility of the salts decreases considerably in the order $Mg > Ca > Zn$ by choosing magnesium-, potassium-, and zinc oleates and isooctane as compounds representing a model of the system "high-molecular salt - polymer". This fact proves the above

Card 2/3

SOV/20-120-3-27,67

On the Structure of the Vulcanisation-Network in Carboxyl-Containing
Polymers

mentioned view concerning the nature of the cross links
produced in the vulcanization, which apparently play the
part of a peculiar "active filling substances". There are
3 figures, 1 table, and 3 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva
(All-Union Scientific Research Institute of Synthetic Rubber
imeni S. V. Lebedev)

PRESENTED: January 31, 1958, by V. A. Kargin, Member, Academy of
Sciences, USSR

SUBMITTED: December 18, 1957

1. Synthesis rubber--Structural analysis 2. Polymers--Appli-
cations 3. Vulcanization--Analysis 4. Metal oxides--Applications

Card 3/3

ACC NR: AP7005430

SOURCE CODE: UR/0138/66/000/005/0004/0010

AUTHOR: Motovilova, N. N.; Starovoytova, Ye. I.

ORG: All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)

TITLE: Organosilicon compounds containing heteroatoms (Phosphorus, boron)

SOURCE: Kauchuk i rezina, no. 5, 1966, 4-10

TOPIC TAGS: organosilicon compound, polysiloxane

ABSTRACT: In addition to the high molecular weight organoelemental compounds in which heteroatoms (titanium, tin, lead, germanium, aluminum, boron, phosphorus etc.) are found in the side groups, polymers with heteroatoms in the main chain surrounded by organic radicals have acquired much importance recently. The introduction of heteroatoms in the main chain of polysiloxane as well as into the side organic radicals contributes to a significant improvement in a number of their properties, (thermal stability, water resistance, radiation stability, etc.). The patent literature of foreign countries, devoted to the problems of obtaining and using organosilicon compounds (monomers, homopolymers and copolymers) containing phosphorus and boron are examined in this article.

A number of polymers and the ways to obtain them are described. Orig. art. has: 8 formulas. JPRS: 33,970

SUB CODE: 07 / SUBM DATE: 19May65 / OTH REF: 038

Card 1/1

IMP. 470 01 . 517 05 001 11 (000 01

STAROVSKAYA, V. I.

"The structure of Einhorn's "2-hydroxy-5-nitrobenzyl diethylamine." by V. I. Starovskaya and K. S. Topchiev (p.525)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1951, Volume 21, No. 3

STAROVSKIY O.V.

Reactivity of mono- and bis(*p*-nitrophenyl)ferrocene and diacetylferrocene. A. N. Nesmerjanov, E. G. Perevalova, R. V. Golovaya, N. A. Simukova, and O. V. Starovskiy (M. V. Lomonosov State Univ., Moscow). *Izv. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1957, 638-40. — Treatment of *p*-nitrophenylferrocene with $Hg(OAc)_2$ (sic) gave 15% bis(chloromercurio)-*p*-nitrophenylferrocene, red solid, sol. only in Me_2CO ; it decamp. on heating. Adding 0.1 mole ferrocene in 200 ml. $AcOH$ to $p-O_2NC_6H_4N_2Cl$ (1: from 0.4 mole amine, stirring 2 hrs., and filtering gave 57% 1,1'-bis(*p*-nitrophenyl)ferrocene, reduced with $Sn-HCl$ to 81% bis(*p*-aminophenyl)ferrocene, yellow, decamp. (from $EtOH$); its dibenzylidene deriv., m. $222-3^\circ$ (from CH_2Cl_2). Similarly, ferrocene gave 17% bis(*p*-bromophenyl)ferrocene, m. $197-7.5^\circ$ (from petr. ether- $EtOH$). Adding 1 to diacetylferrocene in $AcOH$ and stirring 0.5 hr. gave a ppt. which on leaching with C_6H_6 and evapg. the solvent yielded 49% (*p*-nitrophenylazo)acetocyclopentadiene, red solid, decamp. $202-3^\circ$ (from $CHCl_3$); no starting material was recovered. Similar reaction with PhN_2Cl gave 53% initial diacetylferrocene and 40% orange-red (phenylazo)acetocyclopentadiene, m. $71-2^\circ$ (from aq. $EtOH$), showing monomer mol. wt. Diacetylferrocene with $p-Me-C_6H_4N_2Cl$ was sluggish and after 1 hr. at $50-55^\circ$ gave 72% starting material and 17% (*p*-toluenazo)acetocyclopentadiene, m. $105-7^\circ$ (from cyclopentane). G. M. Kosolapoff

STAROVSKIY, O. V.

"The Structure of Ferrocene Disulfochloride"

a report presented at Symposium of the International Union of
Crystallography Leningrad, 21-27 May 1959

Starovskiy, O. V.

81930
S/062/60/000/06/01/011
B020/B061

5.3700B
AUTHORS:

Starovskiy, O. V., Struchkov, Yu. T.

TITLE:

Molecular and Crystal Structure of Ferrocene Disulfochloride

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1960, No. 6, pp. 1001 - 1009

TEXT: Ferrocene disulfochloride ($\text{ClSO}_2\text{C}_5\text{H}_4)_2\text{Fe}$, synthesized by E. G. Perevalova and S. S. Churanov (Ref. 4) in the laboratoriya khimicheskogo fakul'teta MGU (Laboratory of the Department of Chemistry of Moscow State University), is examined here. Ferrocene disulfochloride forms thin bright yellow scales which crystallize well from dichloroethane and benzene; its decomposition point is 150° . As apart from the majority of sulfochlorides, ferrocene disulfochloride is stable in air, and is soluble in aqueous alcohol. It is also extraordinarily resistant to radioactive radiation, all of which points to the fact that the polarity of the bond S - Cl in ferrocene disulfochloride is considerably smaller than in other aromatic sulfochlorides. The structure of ferrocene di-

Card 1/3

Molecular and Crystal Structure of Ferrocene
Disulfochloride81930
S/062/60/000/06/01/011
B020/B061

sulfochloride was examined roentgenographically, and the parameters of the crystal lattice were determined, as were the shortest intermolecular distances. Fig. 1 shows the scheme of the molecular structure of ferrocene disulfochloride, and Fig 2, the projection of the electron density ρ onto the xz-plane. The atomic coordinates obtained in the initial stages of the analysis (Table 1) and the atomic coordinates obtained from a three-dimensional electron-density series (Table 2) are given. Fig. 3 shows the model of the molecule on the basis of the three-dimensional electron-density series. The interatomic distances and the valence angle in ferrocene disulfochloride are set out in Table 3. Fig. 4 shows the geometry of ferrocene disulfochloride on the basis of data obtained in the course of this investigation, Fig. 5, the scheme of the packing of the ferrocene disulfochloride molecule in the crystal and the shortest intermolecular distances in the projection onto xy, Fig. 6, the scheme of the packing of the ferrocene disulfochloride molecule and the shortest intermolecular distances in the projection onto xz, and Fig. 7 the packing of the ferrocene disulfochloride molecule on limitation of the atoms by the intermolecular radii in the view perpendicular to the xz-plane. It is shown on the basis of the results obtained that a close electronic interaction

Card 2/3

53700

2209, 1236, 1273

86045

S/020/60/135/003/029/039
B016/B054

AUTHORS: Starovskiy, O. V. and Struchkov, Yu. T.

TITLE: The Structure of Ditoluene Chromium Iodide ⁷

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 3,
pp. 620 - 623

TEXT: The authors discuss the structure of crystals of ditoluene chromium iodide (supplied by V. M. Chibrikin, collaborator of the Institut khimicheskoy fiziki AN SSSR, Institute of Chemical Physics of the AS USSR). They state that this substance crystallizes in the steric group $J2/m$, and give its crystallographic constants. The cation $(CH_3C_6H_5)_2Cr^+$ has a $2/m$ symmetry in the crystal. Thus, the total configuration of the cation is determined: it is prismatic, with a trans-position of the methyl groups. The authors constructed the electron density in the plane xOz , and determined therefrom the positions of the atoms C_0 , C_1 , and C_4 ; by the same method, they determined the coordinates of all C atoms by means of parallel planes. Fig.1 gives the interatomic

Card 1/4

86045

The Structure of Ditoluene Chromium Iodide S/020/60/135/003/029/039
B016/B054

distances in the configuration of the cation. The authors conclude from their results that the length of the metal-carbon bond remains practically unchanged on the transition from an uncharged "sandwich" to the cation. The length of the bond $C_0 - C_1$ (between the C atom of the methyl group and the connected ring atom) is indicated with 1.49 Å. So, this bond is a little shorter than a single bond in aromatic compounds (~ 1.52 Å). The authors explain this deviation by the fact that, in the formation of the "sandwich" type, the π -electrons of the aromatic ring are attracted by the positive charge to the central metal atom. In the present case, this attraction is intensified by the positive charge of the chromium atom. This withdrawal of π -electrons from the six-membered ring causes a slight shift of the electrons of the methyl group towards the ring. By this effect, the C-C bonds become longer as compared with benzene, whereas the C-C bond between the C atom of the methyl group and the C atom of the aromatic ring becomes shorter. By this electron shift, the positive charge of the Cr atom decreases slightly, and causes the formation of a positive charge on the organic part of the cation. The investigations showed that the CH_3 group is outside the plane of the carbon ring, which

Card 2/4

The Structure of Ditoluene Chromium Iodide ⁸⁶⁰⁴⁵ S/020/60/135/003/029/039
B016/B054

is explained by a compromise between a "compression" of atoms (reduction of the distance $\text{CH}_3 \dots \text{C}_4^1$ by $3.8 - 3.5 = 0.3$ Å) and a distortion of the valency angle of the carbon atom C_4 by 4° . Fig.3 shows a projection of the structure of $(\text{CH}_3\text{C}_6\text{H}_5)_2\text{CrI}$ on the plane ac with the shortest inter-ionic distances. This structure consists of infinitely dense layers in the planes xOz ; $x1/2z$; $x1z \dots$. The layers have no limit density; they retain holes in the positions $x = 1/2$, $z = 0$, and $x = 1/2$, $z = 1/2$. These holes are covered on top and bottom by ions of the upper and lower layers. The authors consider the very simple type of ion packing to be the most important characteristic of this crystal structure. In this fact, they see a confirmation of the similarity of inorganic and elemental-organic ion structures to spherical-symmetric ions (particularly to the sandwich- π -complexes). They thank Professor A. I. Kitaygorodskiy for his interest in their work. There are 3 figures and 7 references: 2 Soviet, 3 British, and 2 German. X

Card 3/4

86045

The Structure of Ditoluene Chromium Iodide

S/020/60/135/003/029/039
B016/B054

ASSOCIATION: Institut elementorganicheskikh soyedineniy Akademii
nauk SSSR (Institute of Elemental-organic Compounds of the
Academy of Science, USSR)

PRESENTED: May 23, 1960, by A. N. Nesmeyanov, Academician

SUBMITTED: May 17, 1960

Card 4/4

STAROVSKIY, O.V.; STRUCHKOV, Yu.T.

X-ray diffraction studies of $\text{Co}_2(\text{C}_5\text{H}_5)_5$. Zhur.strukt.khim.
2 no.5:612-614 S-O '61. (MIRA 14:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Cobalt compounds) (Crystallography)

STAROVSKIY, O.V.

Problems of structural chemistry discussed at the Riga conference.
Zhur.strukt.khim. 2 no.5:640-641 S-O '61. (MIRA 14:11)
(Chemical structure--Congresses)

S/192/62/003/003/006/006
D228/D307

AUTHOR: Starovskiy, O. V.

TITLE: 4th Conference on Crystal Chemistry

PERIODICAL: Zhurnal strukturnoy khimii, v. 3, no. 3, 1962, 376-381

TEXT: The 4th Conference on crystal chemistry was held in Moscow on December 19-23, 1961. It was organized by the Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova, Akademii nauk SSSR (Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences, USSR); the Akademiya nauk Moldavskoy SSSR (Academy of Sciences, Moldavian SSR); the Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Inorganic Chemistry, Siberian Division, Academy of Sciences, USSR); and the Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University im. M. V. Lomonosov). At the plenary sessions, Academician N. V. Belov presented his paper "New pages of the second chapter of silicate crystal chemistry and parallels from the crystal chemistry of phosphates". G. B. Bokiy, Corresponding

Card 1/7

4th Conference on ...

S/192/62/003/003/006/006
D228/D307

Member of the AS USSR, reviewed some communications on the crystal chemistry of complex compounds: "Determination of the structural motif and the chemical structure of the complex compound $K_2OsO_4 \cdot 2H_2O$ "; "Structure of the compound $NaNH_4[MoO_3C_2O_4] \cdot 2H_2O$ "; "New data on transinfluence in crystalline substances"; "Magnetic susceptibility and stereochemistry of vanadium intracomplex compounds with Schiff bases"; "Structure of zinc hexafluorogermanate hexahydrate $Zn(H_2O)_6GeF_6$ "; "Question of the structure of complex titanosilicate compounds of divalent metals"; and "Some data on the properties of crystalline oxaloniobates of alkali metals". M. A. Poray-Koshits also reviewed various papers on the crystal chemistry of complex compounds: "Structure of $NiEn_2Cl_2$ and $NiEn_2Br_2$ crystals"; "Crystal structure of the intracomplex compound $Ni[(C_2H_2O)_2PS_2]_2$ "; "Investigation of the structure of the pyridine tetrachloride of divalent rhenium -- $(PyH)HReCl_4$ "; "X-ray investigation of divalent palladi-

Card 2/7

4th Conference on ...

S/192/62/003/003/006/006
D228/D307

um allylchloride"; "Roentgeno-structural investigation of benzene-diazonium chloride and mercury pentachloride"; "Some questions of the crystal chemistry of Group VIII metal complex-compounds"; and "Roentgeno-structural investigation of copper kupferronate (II)". Further works devoted to this question were reviewed by T. I. Malinovskiy. They included: "Structure of bivalent metal halodiamminates"; "Structure of green cobalt dinuclear ammines with an O_2 -group"; "Roentgenographic investigation of $[CoPhen_2Cl_2]Cl_2 \cdot 3H_2O$ "; and "Roentgenographic investigation of cobalt roentanopentamine nitrate and thiocyanate". Turning to organic crystal chemistry, A. I. Kitaygorodskiy presented a paper entitled "Physical bases of organic crystal chemistry". Yu. T. Struchkov's review discourse -- "Crystal chemistry of organic compounds" -- considered the following works: "Structures of acenaphthene haloderivatives"; "Electronographic investigation of the ferrocene molecule's structure"; "Roentgeno-structural investigation of the chloride of 3,3'-diethylthiocarbocyanine and di-para-tolyldisulfide"; "Conformation of naphthalene parahaloderivatives"; "Roentgeno-structural investi-

Card 3/7

4th Conference on ...

S/192/62/003/003/006/006
D228/D307

gations of para-rodanoaniline, para-diroadanobenzene, and zinc chloride complexes with acetonitrile and thiourea"; "Roentgeno-structural investigations of caprolactan and thiocaprolactan"; "Crystal chemical investigation of some organomercury compounds and halomercurates"; "Crystal structures of ionocenic compounds"; "Conformation of spatially strained aromatic compounds"; and "Crystal chemistry of α -halogen substituted anthraquinones (crystal structure of 1,5-dibromoanthraquinone)". Yu. V. Mnyukh's review lecture was also on the crystal chemistry of organic compounds and included these works: "Some patterns of entry of ingredients into organic crystals"; "Jump in the volume and in the heat of phase transfer in 1,8-dinitronaphthalene"; "Structures of the rotary-crystalline (gas-crystalline) type"; and "Investigations of the solubility of organic matter in the solid state". Ye. S. Makarov reviewed six papers on uranium crystal chemistry: "Structure of some sulfocyanide compounds"; "Certain questions of the crystal chemistry of uranates and anhydrous uranyl salts"; "Crystal structure of umohoite -- $\text{UO}_3 \cdot \text{MoO}_3 \cdot 4\text{H}_2\text{O}$ "; "Crystal structure of uranites: metatorbenite, me-

Card 4/7

4th Conference on ...

S/192/62/003/003/006/006
D228/D307

taotenite, uranocirnite, bassetite"; "Crystal structure of uraninites and nasturanites"; and "Crystal structure of natural uranium silicates. 1. Sklodowskite, kasolite". Ye. A. Poray-Koshits' paper -- "Contemporary state of the question of glass crystal chemistry according to the data of diffraction methods of investigation" -- summarized the existing data on the structure of glasses. The review articles of V. I. Smirnov and Yu. A. Pyatenko were devoted to works on the crystal chemistry of minerals: "Crystal chemistry of burbankite"; "New data on the crystal chemical similarity of barium silicates and their fluoroberyllate models"; "Crystal structure of RbBe_2F_5 "; "Systematization of silico-oxygen radicals"; "Crystal structure of hopeite"; "Structure of some metafluoroberyllates"; "Crystal structures of anapaite, fairfieldite, and collinsite"; "Crystal structure of baotite"; "Minerals of the group wöhlerite-lāvenite"; "Roentgenographic study of some rhombic titanoniobates of the composition AB_2X_6 "; "Crystal structure of the mineral vlasovite -- $\text{Na}_2\text{Zr}[\text{Si}_4\text{O}_{11}]$ "; "Mineral series with inherited

Card 5/7

4th Conference on ...

S/192/62/003/003/006/006
D228/D307

crystal structures"; "Theory of the polymorphism of layered silicates"; "Structure of belovite"; "Nature of chalcopyrite twinning"; "Complex oxide minerals with structures derived from the cubic type $\text{CaF}_2\text{-CeO}_2$ "; and "Crystal chemistry of tourmaline". Turning to the crystal chemistry of intermetallic compounds, N. V. Ageyev and P. I. Kripyakevich reviewed seven papers: "Crystal structures of the compounds of rhenium and the transition metals"; "Crystal structures of T-, R-, and α -phases in ternary systems of transition metals and silicon"; "Structure of compounds of the isomorphous group CoSb_2 , RbSb_2 , IrSb_2 , and $\alpha\text{-RbBi}_2$ "; "Crystal structures of ternary compounds in the systems Ce-Mn-Al, Ce-Fe-Al, and Ce-Cu-Al"; "Crystal structures of compounds of magnesium with alkaline- and rare-earth elements"; "New ternary Lavec phases in the systems $\text{Mg}(\text{Cd}, \text{Mn})\text{-Cu}(\text{Ni})\text{-Zn}(\text{Ga}, \text{Ge}, \text{In}, \text{Sn})$ "; and "Crystalline ternary-compound structures in the system lithium-copper-aluminum". G. V. Samsonov considered works on the crystal chemical peculiarities of borides, carbides, nitrides, silicides, and phosphides of transi-

Card 6/7

SIRKOVSKIY, G.V.; SIRKOVSKIY, M.I.

Making the structure of ferrocene disulfonchloride more precise.
Zhur.strukt.khim. 5 no. 2:267-268 Pt-A; '84. (MIRA 17:8)

I. Institut elementoorganicheskikh soedineniy AN SSSR.

STAROVSKIY, O.V.; STRUCHKOV, Yu.T.

X-ray structural analysis of the $\text{Co}_2\text{C}_{25}\text{H}_{24}$ compound. Zhur. strukt.
khim. 6 no.2:248-261 Mr-Apr '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

STAROVSKIY, V.N.

AUTHOR: Starovskiy, V.N.

2-1-1/9

TITLE: The Development of Soviet Statistical Science and Experience in Forty Years (Razvitiye sovetskoy statisticheskoy nauki i praktiki za 40 let)

PERIODICAL: Vestnik Statistiki, 1958, # 1, p 3-15 (USSR)

ABSTRACT: The author gives a detailed survey about the development of Soviet statistics from the October Revolution until now. The author is trying hard to follow the Party line and therefore the article contains mainly propaganda and citations from Lenin's works.

The TsSU (Tsentral'noye statisticheskoye upravleniye) was founded in June 1918, P.I. Popov was designated head.

During the first period of Soviet statistics from 1918-1926 bad mistakes were made in working out statistical data regarding agriculture and national economy balance.

During the second period, from 1926-1930, N.N. Smit, N.Ya. Vorob'yev, V.I. Veyts and other statisticians developed the industrial statistics. In 1926, a general census was carried out and the mechanization of the TsSU statistical work started under supervision of S.K. Neslukhovskiy.

Card 1/3

During the third period of Soviet statistics, from 1930-

2-1-1/9

The Development of Soviet Statistical Science and Experience in Fourty Years

1948, the TsSU was attached to the Gosplan. Important works were carried out, e.g. the general census in 1939. During the war the TsSU had to work out statistical data enabling the government to determine the material resources.

In 1948, the TsSU was separated from the Gosplan and became again an independent institution. The reason for it was, that the TsSU did not longer correspond with the growing demands of planning institutions. The TsSU was ordered to work up scientifically verified statistical data, showing the execution of state planning, the growth of socialist economy and culture, the quantity of material resources in national economy and their utilization, the correlative connections between different economical branches and the existing resources for further production increases.

The following prominent Soviet statisticians are mentioned: the Academicians V.S. Nemchinov, I.S. Malyshev and A.N. Pavlov for their work in agricultural statistics; S.G. Strumilin took part in creating a scientific methodology of Soviet statistics, his works on economical and labor statistics are widely known; A.I. Petrov, V.A. Sobol', the demographs S.A. Novosel'skiy, M.V. Ptukha,

Card 2/3

OSTROVITYANOV, K.V., akademik; LEONT'YEV, L.A.; LAPTEV, I.D.; GATOVSKIY, L.M.,
doktor ekonom.nauk; KUZ'MINOV, I.I., doktor ekonom.nauk. Prinsipal
uchastiye STAROVSKIY, V.N.. RABINOVICH, M., red.; DANILINA, A.,
tekhn.red.

[Political economy; textbook] Politicheskaya ekonomiya; uchebnik.
Izd.3, perer. i dop. Moskva, Gos.izd-vo polit.lit-ry, 1959. 707 p.
(MIRA 12:10)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Chleny-korrespondenty
Akademii nauk SSSR (for Leont'yev, Starovskiy). 3. Deystvitel'nyy
chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (for Laptev).

(Economics)

16(2)

SOV/2-59-3-1/13

AUTHOR: Starovskiy, V.

TITLE: The Seven-Year Plan and the Tasks of Soviet Statistics. (Semiletniy plan i zadachi sovetskoy statistiki)

PERIODICAL: Vestnik statistiki, 1959, Nr 3, pp 3-14 (USSR)

ABSTRACT: The author discusses the tasks and problems of the statisticians in connection with the goals of the 1959-1965 plan and the reorganized administration of the USSR. The experience of one-and-a-half years after the All-Union statisticians conference shows that statistical data is being obtained faster and cheaper than even before. But there are still shortcomings. Some organizations are collecting excessive reports and data. Little is being done to bring order into the primary internal accounting and calculations of enterprises (which takes too many workers). Calculating machine stations at the enterprises are few. TsSU is taking over from agricultural specialists all paper work, but attempts are still being made to block this

Card 1/4

SOV/2-59-3-1/13

The Seven-Year Plan and the Tasks of Soviet Statistics.

move. The statistician must now be a highly-skilled economist and a man of vast knowledge. Only after the staff of the calculating machine stations was filled with statisticians and economists could they start the proper statistical work including checks of the primary data and the setting-up of ready statistical tables. Preparations are almost complete for the re-evaluation and general inventory of all basic funds in the country. By the end of 1959, the inventory work will start directly at the enterprises and the construction projects (a colossal job that has not been done since 1925). The idea is to find the criteria of the most effective capital investments, in order to obtain a maximum production increase in the shortest possible time and with the lowest possible expenditure. One example of this is the trend (pointed out by Khrushchev) in the construction of thermal electric power plants, large power plants working on natural

Card 2/4

SOV/2-59-3-1/13

The Seven-Year Plan and the Tasks of Soviet Statistics.

gas, mazut and cheap coal. A separate recording of the growth of the capacities created by new construction projects and by the re-equipment of existing enterprises must be organized. The newly introduced index-expenditures per ruble of production - requires that financial statistics be improved. In the case of kolkhoz production, this is a very complex task, so complex that some theoreticians until recently considered it impossible to calculate the prime cost of kolkhoz products. This problem is yet to be studied, particularly in view of the transition from the kolkhoz income share per "trudoden" ("workday") to pay in cash. It is planned for 1959 to determine the distribution of all workers and office employees of industry, offices and organizations by earnings, by length of the workday, by technical professions and administrative functions, etc. to provide a base for the regulation of wages. Pensionaries will have to be grouped by the amount of the pension.

Card 3/4

SOV/2-59-3-1/13

The Seven-Year Plan and the Tasks of Soviet Statistics.

The tasks also include deliveries and the distribution of consumer goods, the prices and consumption of consumer goods. The Nauchno-metodicheskiiy sovet TsSU SSSR (Council of Scientific Methods of the Central Statistics Board of the USSR) will extend its activities. The training system for statisticians will also have to be expanded by extending the evening training, and in particular the correspondence training at vuzes and technical schools. There is 1 American reference.

Card 4/4

STAROVSKIY, V.

Office equipment should be on the level of industrial equipment.
FTO 2 no.8:13-14 Ag '60. (MIRA 13:10)

1. Chlen-korrespondent AN SSSR, nachal'nik Tsentral'nogo statisticheskogo upravleniya pri Sovete Ministrov SSSR, predsedatel' Orgkomiteta po provedeniyu Vsesoyuznogo soveshchaniya.
(Office equipment and supplies)

STAROVSKIY, V.

Method of comparing economic indices of the U.S.S.R. and the U.S.A.
Vop. ekon. no.4:103-117 Ap '60. (MIRA 13:3)

1.Chlen-korrespondent AN SSSR.

(Russia--Economic conditions)

(United States--Economic conditions)

STAROVSKIY, V.

Mechanizing accounting planning and designing work, and the work of engineers and technicians. Sots. trud 5 no.12:3-11 D '60.

(MIRA 14:6)

1. Nachal'nik Tsentral'nogo statisticheskogo upravleniya SSSR.
(Office equipment and supplies)
(Machine accounting)

OSTROVITYANOV, K.V., akademik; GATOVSKIY, L.M.; KUZ'MINOV, I.I.,
doktor ekon. nauk; Prinayali uchastiye: STAROVSKIY, V.N.;
SAKOV, M.P.; BACHURIN, A.V.; ZASLAVSKAYA, T.I.; BOGOMOLOV,
O.T.; RYMALOV, V.V.; RABINOVICH, M., red.; MUKHIN, Yu.,
tekhn. red.

[Economics; textbook] Politicheskaya ekonomiya; uchebnik.
4., perer. i dop. izd. Moskva, Gospolitizdat, 1962. 702 p.
(MIRA 15:11)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Chlen-
korrespondent Akademii nauk SSSR (for Gatovskiy, Starovskiy).
(Economics)

STAROVSKIY, V.N.; TER-MINASOVA, N.

Figures talk. Nauka i zhizn' 30 no.5:2-5 My '63. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR, nachal'nik Tsentral'nogo statisticheskogo upravleniya pri Sovete Ministrov SSSR (for Starovskiy).

SZTAROVSKIJ, V.N. [Starovskiy, V.N.]

Scientific work of the state statistical organs.
Stat szemle 41 no.2:160-171 : F '63.

1. Szovjetunio Minisztertanácsa mellett mukodo
Kozponti Statisztikai Hivatal elnoke.

KELDYSH, M.V., akademik; DORODNITSYN, A.A., akademik; SOBOLEV, S.L., akademik;
TRAPEZNIKOV, V.A., akademik; STAROVSKIY, V.N.; KOEN, I., prof. psikhologii;
BERNAL, D. (Angliya); PAUELL, S.; ARTSIMOVICH, L.A., akademik;
NEMCHINOV, V.S., akademik

Science in the borderland of fantasy. Tekh.mo. 31. no.1:2 of cover, 2,7,
'63. (MIRA 16:3)

1. Prezident AN SSSR (for Keldysh).
2. Chlen-korrespondent AN SSSR (for Starovskiy).
3. Manchesterskiy universitet, Angliya (for Koen).
- 4.. Prezident Vsemirnoy federatsii nauchnykh rabotnikov (for Pauell).
(Science)

OPEYKO, F.A., red.; STAROVYBORNYI, P., red.

[Papers of graduate students] Sbornik nauchnykh rabot
aspirantov. Minsk, Urozhai, 1963. 145 p.

(MIRA 18:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut me-
khanizatsii i elektrifikatsii sel'skogo khozyaystva ne-
chernozemnoy zony SSSR.

ZLOBIN, Nikolay Ignat'yevich; STAROVYBORNYY, P.T., red.; DIK, V.M.,
tekhn. red.

[Over-all mechanization for fields and farms] Kompleksnuiu me-
khanizatsiiu na polia i fermy. Minsk, Gos.izd-vo sel'khoz.
lit-ry BSSR, 1962. 32 p. (MIRA 15:12)
(White Russia---Farm mechanization)

NAZAROV, Sergey Ivanovich; PEREL'MAN, Nikolay Mikhaylovich;
STAROVYBORNIY, P.T., red.; ZEN'KO, M.M., tekhn. red.

[In the advanced line; from work practices of rural inventors
and innovators in Mogilev Province] Na peredovoi linii; iz
opyta raboty sel'skikh izobretatelei i ratsionalizatorov Mogi-
levshchiny. Minsk, Sel'khozgiz BSSR, 1962. 73 p.

(MIRA 15:11)

(Mogilev Province--Agricultural machinery)

BELICHENOK, Ivan Nikolayevich [Belichonak, I.M.]; STAROVYBORNYY,
P.TS. [Staravybarny, P.TS.], red.; ZEN'KO, M.M., tekhn.red.

[Foremost among row crops] Volat siarod prapashnykh.
Minsk, Dziarzh.vyd-va sel'skhaspadarchai lit-ry BSSR,
1963. 30 p. (MIRA 17:1)

1. Zvenevaya mekhanizator kolkhoza "Chyrvonaya ziena"
Lyubanskogo rayona Minskoy oblasti (for Belichenok).

STAROWICZ, J.

TECHNOLOGY

PERIODICAL: PRZEGLAD GORNICZY. Vol. 14, no. 1, Jan. 1958.

STAROWICZ, J. A method of establishing efficiency in the opencast mining of brown coal. p. 42.

Monthly List of East European Accessions (EEAI) LC Vol. 3, no. 4
April 1959, Unclass.

Staronics, J.

Prospects of the development of coal mining in the light of the present achievements
p. 5

PRACOWNIA SPRAWALNICTWA. (Stowarzyszenie Inżynierów i Techników Mechaników Polskich
i Instytut Spawalnictwo) Warszawa, Poland. Vol. 11, No. 10/11, Oct./Nov. 1959.

Monthly List of East European Acquisitions (EMAI) L3, Vol. 9, No. 2, Feb. 1959

Encl.

STAROWICZ, J.; SZYMASZEK, J.; PIECHA, A.

The investment policy of the coal mining industry. p. 20

PRZEGLAD GORNICZY. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Gornictwa) Katowice, Poland. Vol. 15, no. 1/2, Jan./Feb. 1959

Monthly list of East European Accessions (EEAI) LC. Vol. 8, No. 7, July 1959.

Uncl.

DZIEWANSKI, Janusz, mgr inz.; STAROWICZ, Jozef, mgr inz.

Utilization of the gravels of the lower accumulation terrace in
the production of concrete for hydroengineering works. Gosp
wodna 25 no.2:55-60 F '65.

STAROWICZ, Z.

STAROWICZ, Z. Ballade about Master Janusz and his group; a poem. p. 23.

No. 4, Apr. 1955.

TUFYSTA.

GEOGRAPHY & GEOLOGY

Warszawa, Poland

So: East European Accession, Vol. 5, No. 5, May 1956

STAROWICZ, Zygmunt

Third International Exhibition of Refrigeration and
Air-Conditioning in London. Przegl techn 84 no.26:7,8
30 Je '63.

1. Sekcja Chlodnicza, Stowarzyszenie Inzynierow i Technikow
Mechanikow Polskich, Warszawa.

STAROWICZ, Zygmunt, mgr inż.

A look at the Hungarian refrigeration industry. Przegl
techn 85 no.49:11 6 D '64.

1. Section of Refrigeration Engineering, Association of
Polish Mechanical Engineers and Technicians, Warsaw.

DAHLIG, Włodzimierz; DECZKOWSKI, J. B.; STAROWIEYSKI, K.

Granulator for low density polyethylene. Polimery 7 no.1:22-24 '62.

1. Katedra Technologii Organicznej I, Politechnika Warszawska
2. Członek Rady Programowej miesięcznika "Polimery" (for Dahlig)

PASYNKIEWICZ, Stanislaw; DAHLIG, Wlodzimierz; STAROWIEYSKI, Kazimierz

Preparation of organvaluminum compounds. Pt.4. Roczniki chemii
36 no.11:1583-1592 '62.

1. Department of Organic Technology I, Institute of Technology,
Warsaw.

DAHLIG, Włodzimierz; STAROWIEYSKI, Kazimierz

Didactic and experimental equipment for the production of polyethylene by the low-pressure method. *Przem chem* 42 no.1: 45-47 Ja '63.

1. Katedra Technologii Organicznej I., Politechnika, Warszawa.

L 16141-66 EWP(j) RM/WW
ACC NR: AP6005897 (N) SOURCE CODE: PO/0099/66/040/001/0000/0053

AUTHOR: Starowieyski, K.; Pasynkiewicz, S.

ORG: Department of Organic Technology I, Institute of Technology
(Politechnika), Warsaw

TITLE: Structures and IR spectra of organoaluminum complexes with nitriles

SOURCE: Roczniki chemii - Annales societatis chimicae polonorum,
v. 40, no. 1, 1966, 47-53

TOPIC TAGS: organoaluminum compound, nitrile, chemical compound,
electron acceptor, benzonitrile, propionitrile, acetonitrile, tri-
methylaluminum, IR spectrum

ABSTRACT: The structure of organoaluminum complexes with benzonitrile, propionitrile, and acetonitrile, as well as the electron-acceptor character of the organoaluminum component were studied by IR spectroscopy. The organoaluminum-nitrile complexes were studied for the first time. Experimental results are shown in Table 1. Table:

Card 1/2

1. 26140-66

ACC NR: AP6005897

Table.1. $C \equiv N$ stretching frequencies (cm^{-1}) of free nitriles and their complexes with organoaluminium compounds (molar ratio 1:1)

Organo-aluminium compounds	C_6H_5CN 2227	$\Delta\nu_{C \equiv N}$	C_6H_5CN 2244	$\Delta\nu_{C \equiv N}$	CH_3CN 2255s, 2295in	$\Delta\nu_{C \equiv N}$
$(C_6H_5)_3Al$	2270	+43	2282	+38	2260m, 2302s	+47
$(C_6H_5)_2AlCl$	2282	+55	2302	+58	2269w, 2311s	+60
$C_6H_5AlCl_2$	2286	+59	2303	+61	2277sh, 2321s	+66
$(CH_3)_3Al$	2264	+37	2231	+45	2255s, 2237s	+42
$(CH_3)_2AlCl$	2279	+52	2306	+62	2255w, 2301s	+48
CH_3AlCl_2	2285	+58	2311	+67	2268vw, 2307s	+52
$AlCl_3$	2286		2313		2311s	

IR spectra in the region of $C \equiv N$ stretching vibrations and structures of the complexes obtained are elucidated in the text, which is published in English in its entirety. Orig. art. has: 2 tables and 8 formulas. [EW]

SUB CODE: 07, 20 SUBM DATE: 23Feb65/ ORIG REF: 001/ OTH REF: 008/

SOV REF: 006/ ATD PRESS: 4204

Card 2/2

L 36901-66 ZWP(j) PM

ACC NR: AP6027100

(N)

SOURCE CODE: PO/0099/66/040/001/0047/0053

AUTHOR: Starowieyski, Kazimierz; Pasynkiewicz, Stanislaw

ORG: Department of Organic Technology, Polytechnic Institute, Warsaw (Katedra Technologii Organicznej Politechniki)

TITLE: Complexes of organoaluminum compounds with nitriles, their structure and infrared spectra

SOURCE: Roczniki chemii - annales societatis chimicae polonorum, v. 40, no. 1, 1966, 47-53

TOPIC TAGS: organoaluminum compound, organic nitrile compound, IR spectrum, molecular structure

ABSTRACT: Infrared spectra of the reaction products of nitriles with methyl and ethyl derivatives of organoaluminum compounds were investigated, in order to determine the structure of the resultant complexes and the relative acidity and electron acceptor capacity of organoaluminum compounds. The authors thank Master Engineer C. Cybulski, Rock Salt Mine, Inowroclaw, for the NaCl plates and Mrs. D. Lyzkowska for skillful technical assistance. Orig. art. has: 2 tables. [Orig. art. in Eng.]
[JPRS: 35,397]

SUB CODE: 07.20 / SUBM DATE: 23Feb65 / ORIG REF: 001 / SOV REF: 006
OTH REF: 008

Cord 1/1 LS

1977 0102

STAROYTOV, I.M.

Results of application of tubular metreurynter. Akush. gin. no.5:21-
24 Sept-Oct 1953. (GIML 25:4)

1. Docent. 2. Of the Obstetric-Gynecological Clinic (Head -- Prof.
L.S. Persianinov), Minsk Medical Institute.

STAROZHILOV, P.M., zasl. zootekhnik RSFSR; BESKHLEBNOV, Yu.A., red.;
SOKOLOVA, N.N., tekhn. red.; PEVZNER, V.I., tekhn. red.

[Organization of artificial insemination in the Altai Territory]
Organizatsiia iskusstvennogo osemeneniia v Altaiskom krae; iz
opyta raboty Kraevoi gosudarstvennoi stantsii po plemennoi rabo-
te i iskusstvennomu osemeneniiu sel'skokhoziaistvennykh zhivot-
nykh. Moskva, Sel'khozizdat, 1962. 93 p. (MIRA 15:11)
(Altai Territory--Artificial insemination)

STAROZHINSKAYA, T. A. Cand Med Sci -- (diss) "Therapeutic pneumothorax
in combination with antibacterial therapy ~~in the treatment~~ of adolescents
and juvenile ^{afflicted with} ~~patients of~~ open pulmonary tuberculosis." Khar'kov, 1958.
16 pp (Min of Health UkSSR. Khar'kov Med Inst), 200 copies (KL, 11-58, 121)

STAROZHITSKIY, A.Ya., inzh.; FRIDLIDER, M.M., inzh.

Selecting the inside diameter for the ring of a polisher. Stek.
i ker. 20 no.5:18-21 My '63. (MIRA 16:7)

1. Gosudarstvennyy proyektno-konstruktorskiy i eksperimental'nyy
institut stekol'nogo mashinostroyeniya.
(Glas manufacture—Equipment and supplies)

STAROZHLOV, D.

7820. STAROZHLOV, D. -- Dostizheniya rubtsovskikh ovtsevodov. (Iz Peredovogo opyta Vchastnikov Ysesoyuz. S.-kh. vystavki). Materialy v pomoshch' lektoru. Barnaul, 1954. 32s. 20 sm. (Lektsionnoye byuro upr. Kul'tury alt. krayispolkoma). 1.500 ekz. b. ts. --~~755-3411~~/ p 636.3.083st(57.12)

SO: Knizhuaya Letopis', Vol. 7, 1955

STAROZHUK, Ya. P.

KUZNETSOV, Leonid Andreyevich; LANDA Ya. A., inzhener, redaktor; GOFMAN, Ye. K.
redaktor izdatel'stva; STAROZHUK, Ya. P., kandidat tekhnicheskikh
nauk, retsenzent; SYCHEVA, O. V., tekhnicheskii redaktor.

[Combustion chambers of stationary gas turbines] Kamery sgoraniia
statsionarnykh gazoturbinnykh ustanovok. Moskva, Gos. nauchno-
tekhn. izd-vo mashinostroit. lit-ry, 1957. 166 p. (MLERA 10:6)
(Gas turbines)

STARR, C.; BERGER, F. [translator]

Organic moderated reactor nuclear power plants.
Jaderna energie 4 no.4:102-105 Ap '58.

BESKID, Mirosław; STARRZYŃSKI, Stefan

Ankocytoma renis. Polski tygod. lek. 15 no. 7: 261-263 15 VII '60.

1. Z Zakładu Anatomii Patologicznej A.M. w Warszawie; kierownik:
prof. dr. n. med. L. Paszkiewicz.

(ADENOLYMPHOMA case reports)

(KIDNEYS neopl.)

ACC NR: AP6017957 SOURCE CODE: UR/0413/66/000/010/0025/0025
INVENTOR: Lebedev, G. N.; Serebryakova, A. V.; Starshenko, V. I.; Rogatkin, A. A.;
Pundrovskiy, V. P.; Khlopkov, L. P.
ORG: None
TITLE: A method for removing phosgene from gases. Class 12, No. 181621
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 25
TOPIC TAGS: phosgene, gas, filtration
ABSTRACT: This Author's Certificate introduces a method for removing phosgene from
gases, particularly from waste gases in the production of titanium tetrachloride.
The degree of purification is increased by adding hydrogen to the vapor-gas phase at
a temperature below 500°C.
SUB CODE: 07/ SUBM DATE: 19Mar64

Card 1/1

UDC; 66.074.66

STARSHENKO, V.I.; MIYERKHANOV, A.; BUKETOV, Ye.A., kand.tekhn.nauk

Autoclave leaching of powellite concentrates. Sbor. nauch. trud.
Kaz GMI no.19:238-240 '60. (MIRA 15:3)
(Powellite) (Leaching)

STARSEIKOV, V., otvetstvennyy za vypusk; LITVINOV, I., tekhn. red.

[Traffic regulations for roads and streets of the Crimea] Pravila
dvizheniya po dorogam i v gorodakh Krymskoi oblasti. Simferopol',
Krymizdat, 1956. 140 p. (MIRA 11:10)

1. Krymskaya oblast'. Sovet deputatov trudyashchikhsya. Ispolnitel'-
nyy komitet.

(Crimea--Traffic regulations)

STARSHININ, Aleksandr Ivanovich, kandidat meditsinskikh nauk; ORLYANSKAYA,
R.L., redaktor; BUL'DYAYEV, N.A., tekhnicheskii redaktor

[Radioactive substances in medicine] Radioaktivnye veshchestva v
meditsine. Moskva, Gos.izd-vo med.lit-ry, 1957. 75 p. (MLBA 10:9)
(RADIOLOGY, MEDICAL)

BURMAKIN, A.V.; KAKHANGVA, L.P.; STARSHININ, D.A.

Paleogene of the Karategin Range. Dokl. AN SSSR 140 no.5:1141-1143
O '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
i Upravleniye geologii i okhrany nedr pri Sovete Ministrov
Tadzhikskoy SSR. Predstavleno akademikom D.V.Nalivkinym.
(Karategin Range—Geology, Stratigraphic)

BISKE, Yu.S.; STARSHININ, D.A.

Geology of Paleozoic sediments in the Silyukta region
(Turkestan Range). Vest. IGU 20 no.24:50-55 '65.
(MIRA 19:1)

1. Submitted March 20, 1965.

STARSHININA, L. I. and PRORESHNAYA, T. L.

"Smallpox Vaccination Conditions in the Kirgiz SSR and the Results of
Inoculation with Material From the City of Frunze," Trudy Instituta Epidemiologii i
Mikrobiologii Ministerstva Zdravookhraneniya Kirgizskoy SSR, Frunze, Vol 1, 1952, pp 37-39.

STARSHINOV, B. M.,

"Performance of the Gas in Blast Furnace Stack in Conjunction with the use of Excess Pressure in the Combustion Space." (Dissertation for Degree for Candidate of Technical Sciences) Min Higher Education USSR, Moscow Order of Labor Red Banner Inst of Steel imeni I. V. Stalin, Moscow, 1955

SO: M-1036 28 Mar 56

STARSHINOV, B.N.

Distr: 4E2b/4E2c

¹⁹ Smelting of low-manganese iron in southern plants.
¹⁹ V. P. Onoprienko, B. N. Starshinov, N. M. Kharchenko,
 and A. A. Babit. *Metallurg* 1957, No. 9, 32-3. — A pig iron
 contg. a stable, low concn. of Mn (0.80-0.85%) and a
 stable and relatively low concn. of S (0.045%) was obtained
 by a special melting technique. This resulted in a saving
 of 80% of Mn ore needed, increase of 5.6% iron in the
 charge, reduction of coke consumption by 4.2%, and a
 4.2% increase in furnace productivity. Slag yield was re-
 duced 19.2% and CO₂ in throat gas increased 1.15%.
 Conditions of melting were as follows: basicity of slag 1.28-
 1.30, (CaO + MgO + MnO)/SiO₂ 1.45-1.50, concn. of
 MgO in slag 5.5-5.8%, concn. of Al₂O₃ in slag 5.5%, temp.
 of blow 750-800°, humidity of blow 25-28 g./cu. m., CO₂
 concn. in gas, at periphery 8-9%, center of radius 10-17%,
 in center of furnace 9-10%. V. N. Bednarski

62

BY 1/1

ONOPRIYENKO, V.N., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
STARSHINOV, B.N., kand.tekhn.nauk; TKACHENKO, A.A., inzh; SINITSKIY,
V.D., inzh.; FREYDIN, L.M., inzh.; PORTNOY, L.Ya., inzh.

Operations of the blast furnace no.3 at the Voroshilov Plant using
fluxed IUGOK sinter. Biul.TSNIICM no.17:1-6 (325) '57.

(MIRA 11:4)

(Blast furnaces)

STARSHINOV, B.N.

133-9-2/23

AUTHOR: Onopriyenko, V.P., Starshinov, B.N., Candidates of Technical Sciences and Trachenko, A.A., Sinitskiy, V.D., Freydin, L.M., Portnyy, L.Ya., Engineers.

TITLE: Operation of a Blast Furnace with 1.1 atm. Top Pressure.
(Rabota domennoy pechi s davleniem do 1.1 ati)

PERIODICAL: Stal', 1957, No. 9, pp. 772 - 778 (USSR).

ABSTRACT: The influence of top pressure variation from 0.6 to 1.1 atm. on the operation of a large (1 386 m³) blast furnace was investigated. The profile of the furnace is shown in Fig.1. Characteristics of burden materials and coke during the individual test periods are given in Tables 1 and 2. Operating factors are given in Table 3. Changes in the distribution of CO₂ along the throat radios in Fig.2, the composition and temperatures of the peripheral and top gas in Fig.3, the pressure drop with the height of the furnace in Fig.4, changes in the gas pressure along the furnace throat radius in Fig.5. Changes in the length of tap hole and furnace-operating indices during various testing periods are given in Tables 4 and 5, respectively. On the basis of experience gained, the following conclusions are drawn: an increase of top pressure from 0.6 to 1.1 atm., contributes to the development of the peripheral flow of gases. In such case, a decrease on the coke charge or an increase in the proportion

Card 1/3

133-9-2/23

Operation of a Blast Furnace with 1.1 atm. Top Pressure.

of direct (ore first) charges (with simultaneous dropping of the whole charge) leads to an increase in amount of ore charged to the periphery with a subsequent decrease in the peripheral flow. Static pressure along the furnace height changes lineary. On increasing pressure of gas in the throat from 0.11 atm. to 0.46 atm. and blast volume from 1 400 to 3 400 m³/min, the blast pressure increased more than that of top gas, while the uniform drop of pressure along the height of the furnace was preserved. On increasing mean gas pressure in the furnace by an appropriate increase in driving rate, the blast pressure increases to the same extent as the pressure of gas in the throat. With a constant blast volume, the pressure of gas in the stack increases to a lesser degree than that in the throat. On transfer to a higher top pressure (1.1 atm.) the blast temperature can be increased by 20 - 50 °C and the driving rate increased by 2-6% (in comparison with operating conditions of a top pressure 0.6 - 0.8 atm). The operation of the furnace becomes smooth, but on decreasing top pressure back to 0.6 - 0.8 atm., the smoothness of the operation deteriorates. On increasing top pressure from 0.8 to 1.1 atm., the output of the furnace increased by 8.3% and the coke rate decreased by 2.9%. On decreasing pressure from 1.1 atm. to 0.6 - 0.8 atm., the output of the furnace decreased by 5.0 - 9.3%

Card 2/3

130-58-4-4/20

AUTHORS: Onopriyenko, V.P., Candidate of Technical Sciences,
Starshinov, B.N., Candidate of Technical Sciences,
Netrebko, P.G., Yalovoy, P.S., Rabinovich, G.B., Engineers

TITLE: Blast-furnace Operation at a Top Pressure of Over 1
Atmosphere (Gauge) (Rabota domennoy pechi pri davlenii
kolosnikovyykh gazov vyshe 1 ati)

PERIODICAL: Metallurg, 1958, Nr 4, p 6 (USSR).

ABSTRACT: The authors give operating data for Nr 3 blast furnace
at the Krivorozhstal' Works smelting pig iron (2.3 - 2.75% Si)
from a burden containing 96.7 - 100% sinter and 55.03 -
56.97% Fe for a period (March - October, 1956) when the top
pressure was changed monthly in the range 0.46 - 1.13 atm
(gauge). After allowing for the changing iron content of the
burden, the authors conclude that raising top pressure from
0.46 - 0.71 to 1 - 1.0 atm. (gauge) leads to an increase in
furnace productivity of 4 - 7% and a decrease in coke rate of
5 - 9%. The pressure drop through the furnace and flue-dust
production decreased with increasing top pressure. With
increased top pressure, the furnace tended to work up the
walls and the coke charge was reduced from 6.3 - 6.45 to
5.6 tons, the charging cycles $COxCSx$ and $COxCCSx$ being
Card1/2 adopted. There is 1 table.

Blast-furnace Operation at a Top Pressure of Over 1 Atmosphere
(Gauge) 130-58-4-4/20

ASSOCIATIONS: Ukrainskiy institut metallov (Ukrainian Institute
of Metals) and zavod "Krivorozhstal'" ("Krivorozhstal'"
Works)

Card 2/2

ONOPRIYENKO, V.P., kand. tekhn. nauk; STARSHINOV, B.N., kand. tekhn. nauk

Effect of increased gas pressure on operating conditions of blast
furnaces. Biul. TSNIICM no. 9:9-13 '58. (MIRA 11:7)
(Blast furnaces)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
BRUSOV, L.P., inzh.; LOZOVY, P.R., inzh.; BURDYUKOV, D.P.,
inzh.; ORLOV, V.S., inzh.

Sintering of Krivoy Rog magnetite concentrates. Trudy Ukr.
nauch.-issl.inst.met. no.5:36-52 '59. (MIRA 13:1)

1. Ukrainskiy institut metallov, Krivorozhskiy Yuzhnyy
gornobogatitel'nyy kombinat i Krivorozhskiy metallurgicheskiy
zavod.

(Krivoy Rog--Iron ores) (Sintering)

STARSHINOV, B.N., kand.tekhn.nauk

Investigating static gas pressures in blast furnaces.

Trudy Ukr.nauch.-issl.inst.met. no.5:64-73 '59.
(MIRA 13:1)

(Blast furnaces)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
POKRYSHKIN, V.L., inzh.; ~~SINITSKY, V.D.~~, inzh.

Investigating the composition of cast iron produced in blast
furnaces operating with different gas pressures in the throat.
Trudy Ukr.nauch.-issl.inst.met. no.5:83-91 '59.

(MIRA 13:1)

(Cast iron--Analysis) (Blast furnaces)

SIARSHINOV, B.N., kand.tekhn.nauk; SINITSKIY, V.D., inzh.

Potentialities for accelerating the operation of blast
furnaces transferred to higher and high gas pressures in the
throat. Trudy Ukr.nauch.-issl.inst.met. no.5:92-99 '59.

(MIRA 13:1)

(Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; ONOPRIYENKO, V.P., kand.tekhn.nauk;
BURDYUKOV, D.P., inzh.; KHALIMONOVA, V.I.; SERGIYENKO, L.I.

Sintering fluxed charges with additions of dolomitised
limestone. Metallurg 5 no.2:6-7 F '60.
(MIRA 13:5)

(Sintering)

STARSHINOV, B.N., kand.tekhn.nauk, SAVELOV, N.I., inzh., TARASOV, D.A.,
inzh., SUPRUN, I.Ye., inzh., GORBANEV, Ya.S., inzh., FLISKANOVSKIY,
S.T., inzh.

Adopting a blast furnace with a useful capacity of 1719 m³.
Metallurg 5 no.7:7-9 J1 '60. (MIRA13:7)
(Blast furnaces)

ONOPRIYENKO, V.P.; ASTAKHOV, A.G.; STARSHINOV, B.N.; ORLOV, V.S.; BURDYUKOV,
D.P.; ROVENSKIY, I.I.; KUSHNIREV, V.A.; POKRYSHKIN, V.L.

Obtaining a high-basicity sinter out of Krivoy Rog iron ores.
Trudy Ukr. nauch.-issl. inst. met. no.6:7-22 '60. (MIRA 14:3)
(Krivoy Rog Basin—Iron ores)
(Sintering)

ONOPRIYENKO, V.P.; STARSHINOV, B.N.; POGRYSHKIN, V.L.; SINITSKIY, V.D.

Expansion of iron reduction processes with use in the blast
furnace of fluxed sinter and increased pressure. Trudy Ukr.
nauch.-issl. inst. met. no.6:45-60 '60. (MIRA 14:3)
(Iron—Metallurgy) (Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk;
LUKASHOV, G.G., inzh.; SAVELOV, N.I., inzh.; TARASOV, D.A., inzh.;
SUPRUN, I.Ye., inzh.; TIKHOMIROV, Ye.N., inzh.; SINITSKIY, V.D.,
inzh.; GORBANEV, Ya.S., inzh.; PRIKHOD'KO, L.D., inzh.

Operation of a blast furnace with a capacity of 1513 m³. Biul.
TSIICHM no.9:1-6 '60. (MIRA 15:4)
(Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; ONOPRIYENKO, V.P., kand.tekhn.nauk;
POKRYSHKIN, V.L., kand.tekhn.nauk; NETREBKO, P.G., inzh.;
YALOVY, D.S., inzh.

Slag formation during blast-furnace smelting with fluxed
sinter. Stal' 20 no.8:673-680 Ag '60.

(MIRA 13:7)

(Blast furnaces) (Slag)

SAVADA, I. I., inzh.; TOLSTOY, I. I., inzh.; TROKHOMOV, Ye. N., inzh.;
STARSHINOV, E. V., inzh.; KURBANOV, I. I., inzh.;

Removal of blades with horse removal in the liquid
state. (MIRA 12/10)
(MIRA 12/10)

STARSHINOV, B.N., kand.tekhn.nauk; ANTONOV, V.K., inzh.

All-Union Conference of Blast and Sintering Furnace Operators.
Metallurg 6 no.2:13-14 F '61. (MIRA 14:1)
(Metallurgy--Congresses)

KOCHINEV, Ye.V.; STARSHINOV, B.N.; KORNEV, V.K.; POPOV, Yu.A.

Blowing-in of blast furnaces of a capacity of 1719 m³. Metallurg
6 no.6:3-7 Je '61. (MIRA 14:5)

1. Gipromez, Ukrainskiy institut metallov; Nizhne-Tagil'skiy
metallurgicheskiy kombinat i Chelyabinskiy metallurgicheskiy zavod.
(Blast furnaces--Design and construction)

STARSHINOV, B.N.; KOTEL'NIKOV, I.V.; SINITSKIY, V.I.; LAVRENT'YEV, M.L.
SINITSKIY, V.D.

Blast furnace operation with an addition of natural gas to the blow.
Metallurg 6 no.7:4-8 JI '61. (MIRA 14:6)

1. Zavod im. Il'icha i Ukrainskiy institut metallov.
(Blast furnaces)